Interview Summary Okay EDJ 11/10/05

SN 10,017,643
Docket No. S-96,583

REMARKS

Examiner has rejected Claims 1-5, 7, and 8, now pending in the application, under 35 U.S.C. 102(b) as being clearly anticipated by Murshudov et al. Applicant respectfully traverses these rejections. However, Applicant has revised Claims 1,2,3, and 7 to clarify and distinguish Applicant's invention from noted prior art references as discussed with Examiner during the telephonic conference held on July 20, 2005.

The parties involved in the telephonic conference were Applicant - Thomas Terwilliger, Applicant's representative - Mark N. Fitzgerald, Examiner - Eric S. Dejong, and Examiner John Brusca. All of the currently pending claims [Claims 1-5, 7, and 8] were discussed during the telephonic conference.

After introductions, Examiner Dejong requested Applicant summarize the main points of the proposed response to the June 30, 2005. Applicant first summarized the Examiner's general argument for rejection of the application, which was that Murshudov et al. describes a process known as "macromolecular refinement" that leads to improvement in electron density maps, and which has some similarities to the methods in the application.

Applicant described how the method in the pending application is different in fundamental ways from the method taught in Murshudov et al. Applicant discussed how the improvement of electron density maps using refinement and using density modification use different sets of parameters to describe the crystal structure and because of this they have different properties.

Applicant further described how in macromolecular refinement the parameters are coefficients in a model describing the electron density map. Refinement consists of adjusting the parameters to improve the agreement between structure factors calculated from the model and those measured in an experiment. In density modification the parameters are the crystallographic phases. In density modification the crystallographic phases are adjusted to improve the agreement between an electron density map calculated using these phases and expectations about the features of this